

Cotton/Soybean Insect Newsletter

Volume 12, Issue #14 Edisto Research and Education Center in Blackville, SC 3 August 2017

Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.



Field Day

Our Row-Crop Field Day (mostly cotton and soybeans) at the Edisto Research and Education Center is scheduled for 10 August 2017. Please plan to join us. Here is a picture of the program. **Please let us know by Monday (7 Aug) if you plan to come so we can plan for the tour and lunch.** See you then!

News from Around the State

Dr. Cory Heaton, former county agent and State Wildlife Specialist, reported sub-threshold but building numbers of soybean loopers in soybeans in Orangeburg County and up near Clemson. That is consistent with a report from **Chris Talley**, county agent in Anderson County, who reported seeing a few soybean loopers but not much else in soybeans. **Jay Crouch**, county agent in Newberry, reported that "kudzu bug numbers continue to increase. Immatures being found in scattered locations—nothing warranting treatment yet." **Jonathan Croft**, county agent in Orangeburg County, reported that he is "still only seeing a few worms and stink bugs in

The Edisto Row Crop Field Day
August 10, 2017
Edisto Research & Education Center, 64 Research Road, Blackville, SC

8:00 to 9:00	Registration		
9:00	John Mueller		Welcome...load busses & travel to field areas
9:10	Phillip Williams		Developing a sensor-based, variable-rate nutrient management technique for center pivot irrigation systems
9:20	Williams & Nafchi		Progress report on sensor-based nitrogen management and related equipment
9:30	Jonathan Fox		Real-time, variable-depth tillage for managing soil compaction in cotton production
9:40	Jose Payero		Advances in sensor-based irrigation management
9:50	Kendall Kirk		Variable rate prescription development in cotton and soybeans
10:00	Kendall Kirk		Soybean leaf defoliation sensing
10:20	Mike Marshall		Cotton injury response to auxin herbicides
10:40	Jeremy Greene		Management of insects in cotton
10:50	Jeremy Greene		Management of insects in soybeans
11:10	David Gunter		Row widths and seeding rates comparisons in soybean production
11:20	David Gunter		Soybean OVTs
12:00	Lunch		

Certified Crop Advisor (CCA) and Pesticide License credits will be offered

For more information contact: Ahmad Khalilian akhiln@clemson.edu
Jeremy Greene green4@clemson.edu

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beans. Cotton is being sprayed for stink bugs along with growth regulator. Got report of a few hayfields being sprayed in Dorchester County for armyworms this week. **Charles Davis**, county agent in Calhoun County, reported that he “had a report of 18 worms and 3 stink bugs per shake in some soybeans being looked at by one of our chemical company reps, but I have seen very few moths in cotton. Also, I have noticed aphids appear to be making a rebound in cotton this week.”

Cotton Situation

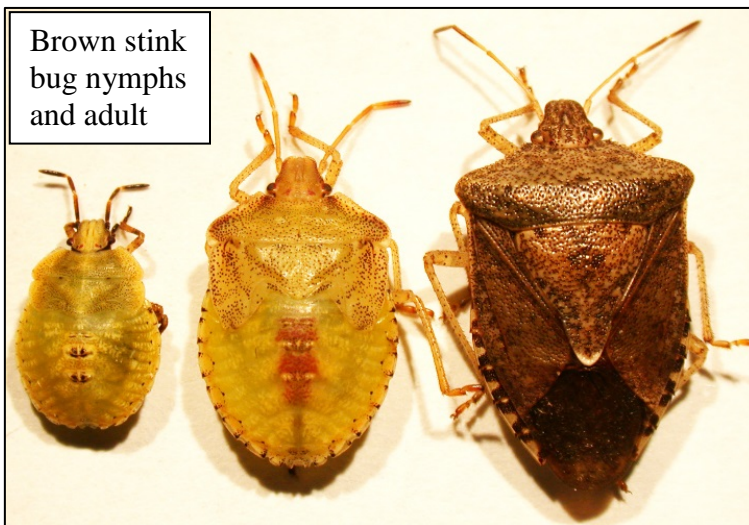
As of 30 July 2017, the USDA NASS South Carolina Statistical Office estimated that about 89% of the crop is squaring, compared with 82% the previous week, 89% at this time last year, and 93% for the 5-year average. About 59% of the crop is setting bolls, compared with 53% the previous week, 54% at this time last year, and 59% for the 5-year average. The condition of the crop was described as 42% excellent, 53% good, 5% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects

Stink bugs continue to be the main issue right now. Do you know how to identify the major species? Here are some photos of nymphs and adults of important species of stink bugs important in cotton.

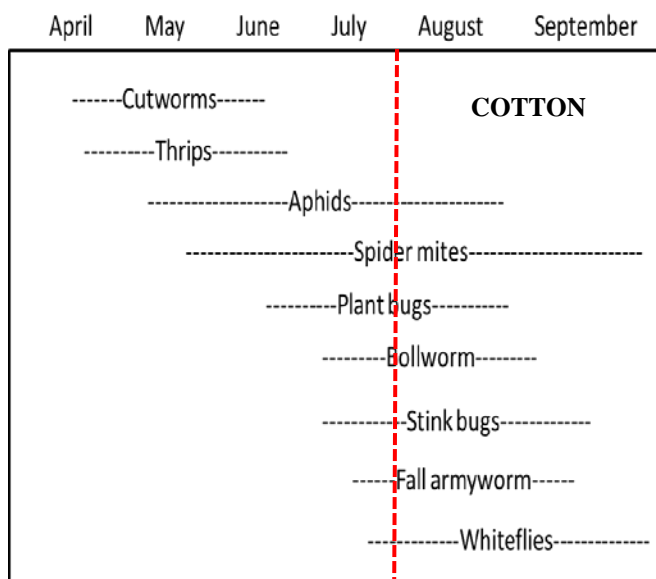


Green stink bug nymphs recently hatched out



Brown stink bug nymphs and adult

You should be able to recognize the immatures, as they often look very different from the adults. The first few instars can be difficult to identify when they are separated from the egg mass they hatched from



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and when you see just a few of them. This can often happen when sampling with a drop cloth and just catching the edge of a hatched out egg mass. So, make sure you can identify the species as immatures. Knowing what species are present is important. I mentioned last week that the brown stink bug is very tolerant to



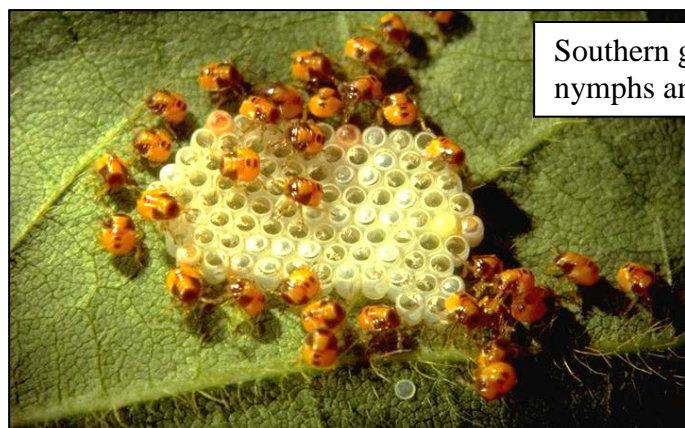
Green stink bug adult

Green stink bug nymph (final instar)

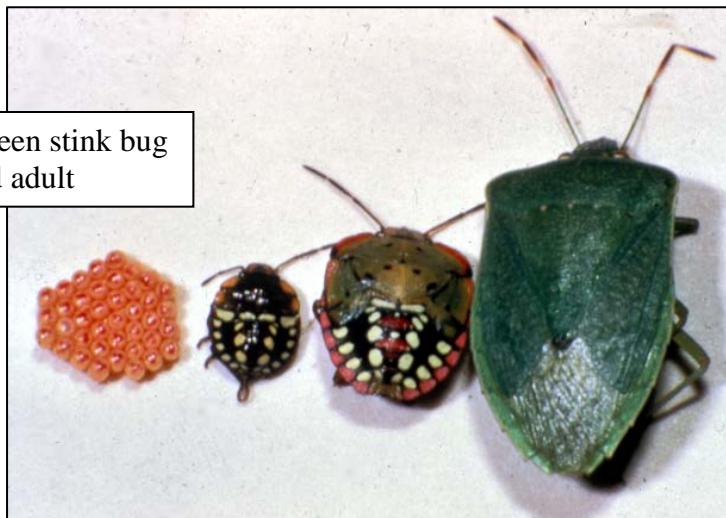


pyrethroids. So, if they are a large proportion of the population, the pyrethroid application will need to be “spiked” with an OP (such as Bidrin) to get good control of all species. As I mentioned last week,

we are hoping that applications of pyrethroids for stink bugs will continue to control bollworms that escape control from Bt proteins. However, as we have been reporting, recent data suggest that we will see field problems in controlling bollworm with pyrethroids at some point. Please report any bollworms surviving applications of a pyrethroid.



Southern green stink bug nymphs and adult



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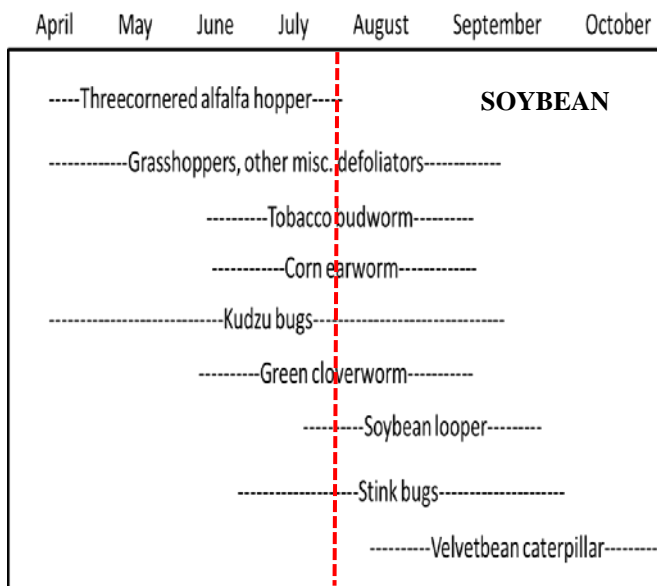


Soybean Situation

As of 30 July 2017, the USDA NASS South Carolina Statistical Office estimated that about 55% of the crop is blooming, compared with 32% the previous week, 45% at this time last year, and 43% for the 5-year average. About 23% of the crop is setting pods, compared with 3% the previous week. The condition of the crop was described as 28% excellent, 66% good, 6% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

Soybean Insects


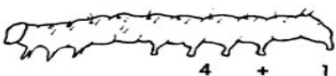


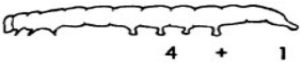


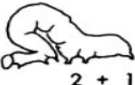





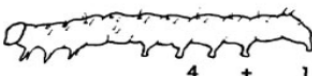
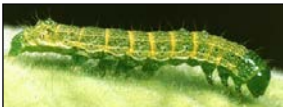
Just as it was last week, there are many different species of pests present in soybeans right now, but none seem to be an issue yet. Populations of stem-feeding kudzu bugs continue to be high enough this year to attract attention when scouting and



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(2017) Prepared by Jeremy Greene, Professor of Entomology

FIELD KEY TO COMMON SOYBEAN CATERpillARS

		CORN EARWORM 4 + 1 pair prolegs Curls up in hand Black "warts" on body	
		VELVETBEAN CATERPILLAR 4 + 1 pair prolegs Very active when handled	
		SOYBEAN LOOPER 2 + 1 pair prolegs Fatter at tail end Looping movement	
		GREEN CLOVERWORM 3 + 1 pair prolegs Not fatter at tail end Looping movement	
		TOBACCO BUDWORM 4 + 1 pair prolegs Curls up in hand Black "warts" on body	

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determining whether or not to treat. Any applications of pyrethroids for kudzu bugs or too early for stink bugs will kill beneficial arthropods and make those fields more prone to infestations of soybean loopers later, so make sure you need to spray before you spray! Continue to identify the moths taking short flights while you are walking fields. Inserted in this newsletter is a guide to identifying the common moths and caterpillars in soybeans.

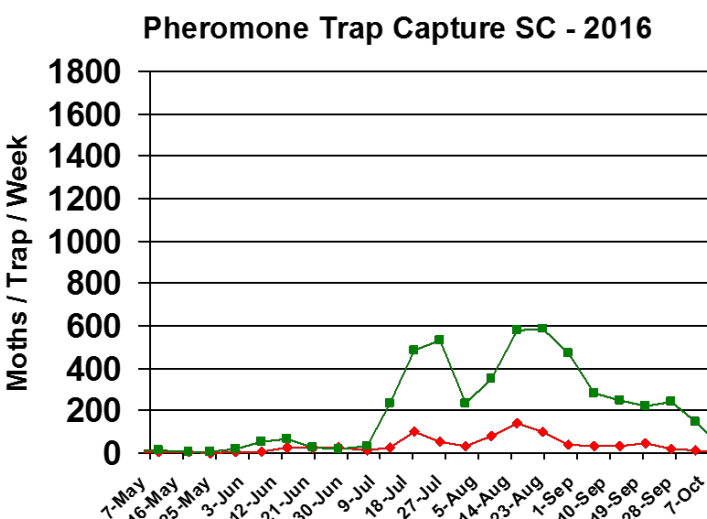
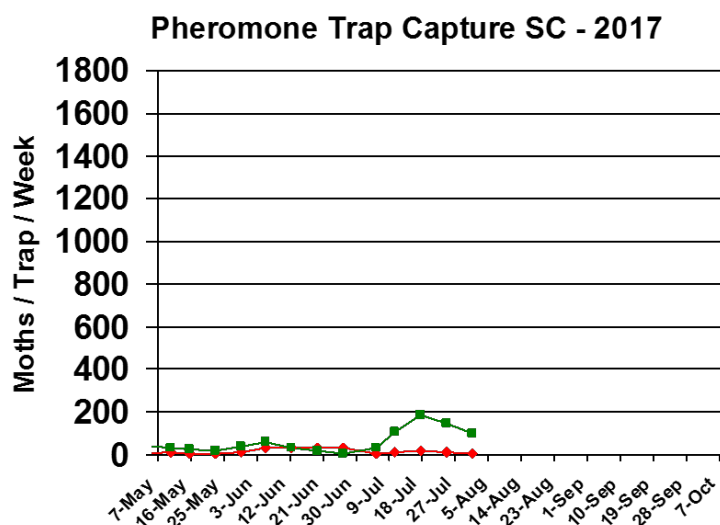
Bollworm & Tobacco Budworm



Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2016 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



—●— TBW
—■— BW



Trap data from 2007-2015 are shown below for reference to other years of trapping data from EREC:

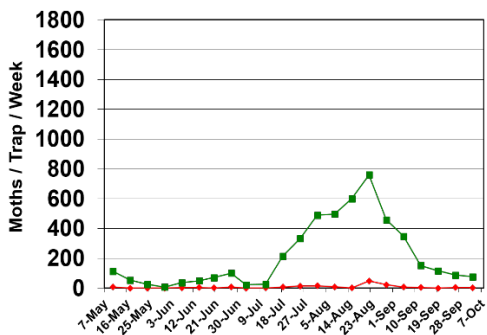
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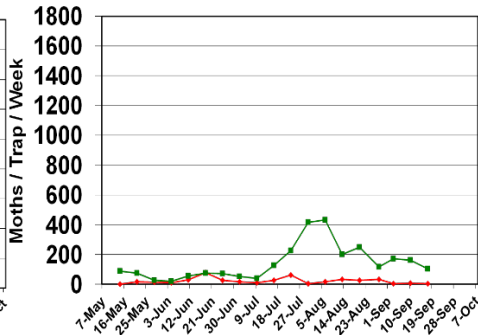
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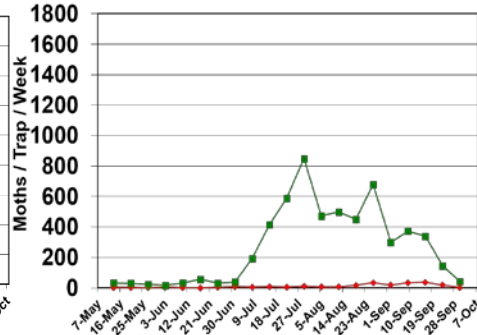
Pheromone Trap Capture SC - 2007



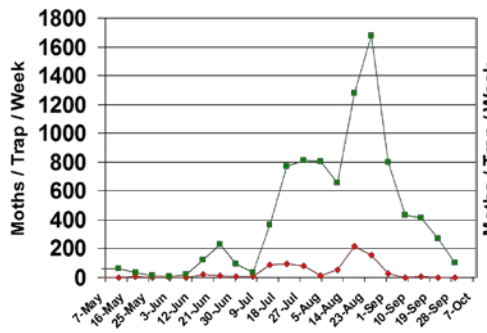
Pheromone Trap Capture SC - 2008



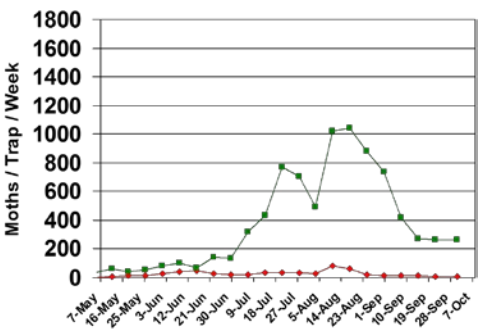
Pheromone Trap Capture SC - 2009



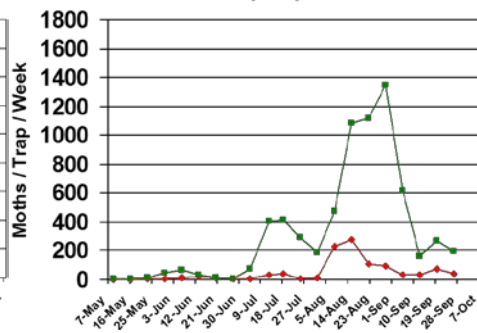
Pheromone Trap Capture SC - 2010



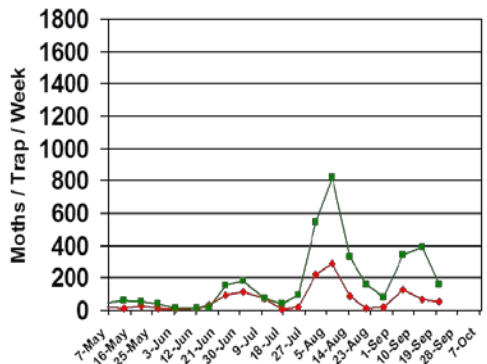
Pheromone Trap Capture SC - 2011



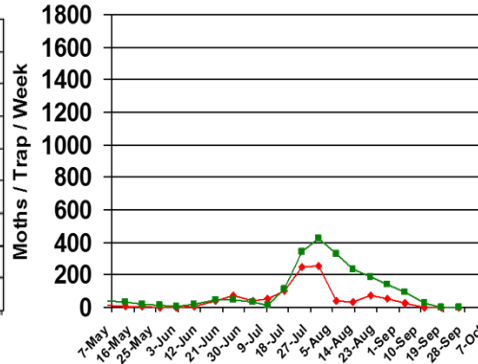
Pheromone Trap Capture SC - 2012



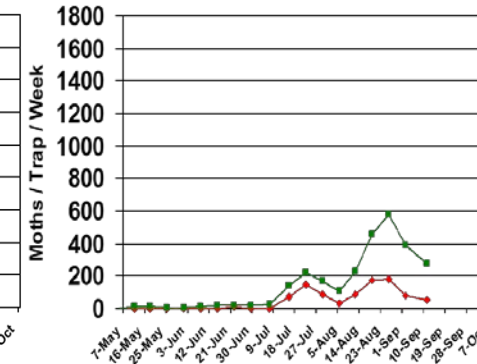
Pheromone Trap Capture SC - 2013



Pheromone Trap Capture SC - 2014



Pheromone Trap Capture SC - 2015



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Pest Management Handbook – 2017

Insect control recommendations are available online in the 2017 South Carolina Pest Management Handbook at: <http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

Free Mobile Apps: “Calibrate My Sprayer” and “Mix My Sprayer”



Download our free mobile apps called “Calibrate My Sprayer” and “Mix My Sprayer” that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):

<http://www.clemson.edu/extension/mobile-apps/>

Need More Information?

For more Clemson University Extension information: <http://www.clemson.edu/extension/>

For historical cotton/soybean insect newsletters:

<http://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology



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